

verified by HM

CG-09/23/2019

JS 3/3/22

Ecotox Report for Case # P-17-0400**General**

Status	09/11/2019	Report Status:	Complete
Date:		CRSS Date:	11/06/2017
SAT Date:	11/07/2017	SAT	T. Behrsing / D.
		Chair:	Pagan-Rodriguez
Consolidated	N	Consolidated Set:	
PMN:			
Ecotox			
Related Cases:			
Health Related			
Cases:			
Submitter:			
CAS Number:			
Chemical			
Name:			
Use:			
Trade Name:			
PV-max(kg/yr):		Ecotox Assessor:	Kennedy, Amuel

**Fate Summary
Statement**

Fate P-17-0400
Summary
Statement: FATE: MW = [redacted] with [redacted] < 500 and [redacted] < 1000
[redacted]
S = Negl.
VP < 1.0E-6 torr at 25 °C (E)
BP > 400 °C (E)
H < 1.00E-8 (E)
POTW removal (%) = 90 via sorption
Time
for complete ultimate aerobic biodeg > mo

Sorption to
soils/sediments = v.strong
PBT Potential: PMN P3B1; Deg Pdt P3B3

*CEB FATE: Migration to ground water = negl
Bioconcentration
factor to be put into E-FAST: Deg Pdt < 10

PMN Material:

Overall wastewater treatment removal is 90% via sorption.

Sorption to sludge is strong based on high molecular volume.

Air

Stripping (Volatilization to air) is negligible based on high molecular volume.

Removal by biodegradation in wastewater treatment is negligible based on high molecular volume.

The aerobic aquatic

biodegradation half-life is greater than months based on high molecular volume.

The anaerobic aquatic biodegradation half-life is greater than months based on the aerobic biodegradation half-life. The anaerobic biodegradation half-life is projected to be greater or equal to the aerobic biodegradation half-life.

Sorption to soil and sediment is very strong based on high molecular volume.

Migration to groundwater is negligible based on high molecular volume.

PMN Material:

High Persistence (P3) is based on the anaerobic biodegradation half-life and high molecular volume.

Low Bioaccumulation potential (B1) is based on high molecular volume.

Incineration Product:

High Persistence (P3) is based on the anaerobic biodegradation half-life and analogous chemicals (perfluorodegradation products).

High Bioaccumulation potential (B3) is based on analogous chemicals (perfluorodegradation products).

Bioconcentration/Bioaccumulation factor to be put into E-Fast: < 10

Physical Chemical Information

Molecular Weight:		
Wt% < 500:		Wt% < 1000:
Physical State - Neat:		
Melting Point:		Melting Point (est):
MP (EPI):		
Vapor Pressure:		Vapor Pressure (est): <0.000001
VP (EPI):		
Water Solubility:		Water Solubility (est): <0.000001
Water Solubility (EPI):		
Henry's Law::		
Log Koc:		Log Koc (EPI):
Log Kow:		Log Kow (EPI):
Log Kow Comment:		

SAT

Concern Level

Ecotox Rating (1):	1
Ecotox Rating Comment (1):	
Ecotox Rating (2):	
Ecotox Rating Comment (2):	
Ecotox Route of Exposure:	No releases to water

Ecotox Comments

Exposure Based Review (Eco):	N
-------------------------------------	---

Ecotox
Comments:
Exposure Based
Testing:

PBT Ratings

Persistence	Bioaccumulation	Toxicity	Comments
3	1	1	PMn
3	3	2	Deg Pdt

Eco-Toxicity Comment:

Fate Ratings

Removal ⁹⁰ ; in WWT/POTW (Overall): Condition	Rating Values	Rating Description				Comment
		1	2	3	4	
Fish BCF:						
Log Fish BCF:						
WWT/POTW Sorption:	3;	Low	Moderate	Strong	V. Strong	
WWT/POTW Stripping:	4;	Extensive	Moderate	Low	Negligible	
Biodegradation Removal:	4;	Unknown	High	Moderate	Negligible	
Biodegradation Destruction:		Unknown	Complete	Partial	—	
Aerobic Biodeg Ult:	4;	<= Days	Weeks	Months	> Months	
Aerobic Biodeg Prim:		<= Days	Weeks	Months	> Months	
Anaerobic Biodeg Ult:	4;	<= Days	Weeks	Months	> Months	
Anaerobic Biodeg Prim:		<= Days	Weeks	Months	> Months	
Hydrolysis (t1/2 at pH 7,25C) A:		<= Minutes	Hours	Days	>= Months	
		<= Minutes	Hours	Days	>= Months	

Removal ⁹⁰ ; in WWT/POTW (Overall):					Comment
Condition	Rating Values	1	2	Rating Description 3	
				4	
					<p>High Persistence (P3) is based on the anaerobic biodegradation half-life and analogous chemicals (perfluorodegradation products). High Bioaccumulation potential (B3) is based on analogous chemicals (perfluorodegradation products).</p> <p>Bioconcentration/Bioaccumulation factor to be put into E-Fast: < 10</p>

Ecotoxicity Values

Test organism	Test Type	Test Endpoint	Predicted	Experimental	Comments
Fish	96-h	LC50	*		Predictions are based on the negligible water solubility of the new chemical substance; * = no effects at saturation.
Daphnid	48-h	LC50	*		Predictions are based on the negligible water solubility of the new chemical substance; * = no effects at saturation.
Green Algae	96-h	EC50	*		Predictions are based on the negligible water solubility of the new chemical substance; * = no

Test organism	Test Type	Test Endpoint	Predicted	Experimental	Comments
Fish	-	Chronic Value	*		effects at saturation. Predictions are based on the negligible water solubility of the new chemical substance; * = no effects at saturation.
Daphnid	-	Chronic Value	*		Predictions are based on the negligible water solubility of the new chemical substance; * = no effects at saturation.
Green Algae	-	Chronic Value	*		Predictions are based on the negligible water solubility of the new chemical substance; * = no effects at saturation.
<p>Ecotox Value Predictions are based on the negligible water solubility of the new chemical substance; solid with an unknown MP (P); effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <150 mg/L as CaCO₃; and TOC <2.0 mg/L.</p>					

Ecotox Factors

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
	*			

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
Acute Aquatic (ppb):				Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified; * = no effects at saturation.
Chronic Aquatic(ppb):	*			Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified; * = no effects at saturation.
Factors	Values	Comments		
SARs:	Nonionic Polymers			
SAR Class:	Polymers-nonionic-HFC			
TSCA				
NCC Category?	<div>None</div>			

Recommended Testing:

Ecotox Factors Environmental

Comments: Hazard: Environmental hazard is relevant to whether a new chemical substance is likely to present unreasonable risk because the significance of the risk is dependent upon both the hazard (or toxicity) of the chemical substance and the extent of exposure to the substance. EPA estimated environmental hazard of this new chemical substance using predictions based on the negligible water solubility of the new chemical substance. Acute and chronic toxicity values estimated for fish, aquatic invertebrates, and algae are all no effects at saturation. These toxicity values indicate that the new chemical substance is expected to have low environmental hazard. Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified.

Environmental Risk: Risk from acute and chronic exposures to the environment are not expected at any concentration of the new chemical substance soluble in the water (i.e., no effects at saturation).

**Comments/Telephone
Log**

Artifact	Update/Upload Time
	